Draft Compatibility Determination Establishment of Drinking Water Stations Buenos Aires National Wildlife Refuge

<u>Use</u>

Allow humanitarian organizations to establish and maintain drinking water stations on Buenos Aires National Wildlife Refuge (NWR) to prevent deaths due to dehydration.

Refuge Name

Buenos Aires National Wildlife Refuge Sasabe, Pima County, Arizona

Establishing and Acquisition Authority

The Buenos Aires Ranch, located in Pima County, Arizona, was recommended for purchase in the 1977 Recovery Plan for protection and recovery of the endangered masked bobwhite quail. Congress approved funding for purchase of the central part of the ranch under authority of the Endangered Species Act of 1973, as amended; and the Fish and Wildlife Act of 1956, as amended, authorizing expenditure of funds for habitat acquisition. The Refuge was officially established in 1985.

Refuge Purposes

The Refuge was established on August 1, 1985 "....to conserve (A) fish or wildlife which are listed as endangered species or threatened species or (B) plants" 16 U.S.C. 1534 (Endangered Species Act of 1973) and for the "...development, advancement, management, conservation, and protection of fish and wildlife resources...." 16 U.S.C. 742f (a) (4) (Fish and Wildlife Act of 1956). Congressional records and other pertinent files show that conservation of the masked bobwhite quail was the major impetus behind establishment of the Buenos Aires NWR. Habitat restoration and the existence of a self-sustaining population of masked bobwhite quail remains a primary goal of the Refuge.

National Wildlife Refuge System Mission

The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Description of Use

Allow humanitarian organizations to establish and maintain water stations on the Refuge to provide drinking water to prevent deaths due to dehydration. The Refuge, as well as other public

lands along the United States/Mexico border, experienced a tremendous increase in illegal border traffic moving through the area; reaching a peak in 2006-2007 when an estimated 250,000 - 300,000 traveled through the Refuge annually. In recent years, largely due to erection of a 7-mile pedestrian border fence, these numbers have declined significantly to approximately 31,500 in 2008 and 20,700 in 2009. It is still common to have 50 to 60 immigrants traveling through the Refuge each night. Because of this amount of illegal border traffic and the hot, dry terrain they travel across, lives have been threatened and occasionally lost due to dehydration, illness, and murder (see Table 1). The last dehydration fatality to occur on the Refuge was in May 2008. Most immigrants are actively traveling during nighttime hours.

		Antonion
Year	Arizona	BANWR
2002	163	3
2003	205	2
2004	234	5
2005	282	2
2006	205	6
2007	237	3
2008	183	2
2009	206	2

Table 1. Border Deaths in Arizona and on Buenos Aires NWR from FY 2002 to FY 2009.

As a result, the Refuge has received requests from various humanitarian organizations to supply drinking water to prevent dehydration deaths among those travelling across the Refuge. Since 2001, Buenos Aires NWR has issued a Special Use Permit to the organization Humane Borders, to maintain three water stations consisting of two 55-gallon drums each on the Refuge. In a November 17, 2008 internal guidance memorandum, the Department of the Interior Deputy Secretary recommended DOI land managers consider a number of factors and conditions before permitting placement of site-based humane water stations on their lands, including:

- Water stations must be accessible from established roads.
- Water stations must not interfere with nor create a safety hazard to Refuge staff, visitors, and Refuge neighbors.
- Water stations must be maintained in accordance with applicable federal, state and local water quality standards.
- Permittees should be required to obtain liability insurance in the amount of \$2,000,000.00 per occurrence that names the U.S. Fish and Wildlife Service and Buenos Aires NWR as additionally insured and holds the United States harmless from any and all liability to third parties as a result of water station activity.

This Compatibility Determination is evaluating potential establishment of additional drinking water stations on Buenos Aires NWR that would consist of a minimum of 1-gallon containers and up to a maximum of two 55-gallon containers. Containers would be tethered at a site in such manner preventing their removal by a person traveling on foot. The sites would be chosen strategically and be consistent with guidelines for water station placement recommended by the November 17, 2008 DOI memorandum and stipulations within this document. Recent federal

court decisions have determined that placement of containers that could be removed from a site is considered litter and/or abandoned property. Therefore, the random placement of removable water containers on migrant trails would not be permitted by the Refuge.

Drinking water stations would be strategically placed on or near existing trails. Refuge management would ensure that water stations would not be placed in areas that may impact threatened or endangered species, sensitive habitat areas, or frequently-used visitor areas such as designated camping sites and recreational trails. Potential sites for placement of water stations were evaluated by considering: the locations of all existing potable water sources, including the three currently-permitted Humane Borders water stations: U.S. Customs and Border Protection (CBP) rescue beacons; SBInet surveillance towers; existing Refuge roads; designated Refuge camp sites; and Refuge administrative, public use and maintenance facilities.

The attached Refuge Water Placement Assessment map was generated by Refuge staff to assist with evaluation of potential new water stations on the Refuge. It delineates one-mile minimum and three-mile maximum buffer zones around existing potable drinking water sites, including a one-mile safety buffer around all Refuge residences and administrative facilities which are equipped with water spigots. A one-quarter mile safety buffer also is shown around all designated camp sites which receive their greatest use by Refuge visitors during October through April. The map enables the Refuge to consider where additional potable drinking water sites may be permitted. Not considered in the mapping exercise were the 150+ stock ponds or developed wildlife waters on the Refuge, even though these could be used by border crossers during life-threatening situations.

Areas shown in light blue or white are 1 to 3 miles or more than three miles, respectively, from any existing drinking water source or rescue facility. Placement of new sites would be along existing roads in areas shown in white but if a genuine need was documented, based on current or future rescues, deaths, or other data, additional sites could be established within light blue areas along existing roads. Levels of use of migrant trails and death location data from years prior to 2009 is of limited value due to major changes in migrant numbers and travel routes and CBP detection strategies and techniques. Development of the SBInet system and construction of the border barrier, in particular, are affecting relative use of various migration corridors.

Availability of Resources

Authorizing placement of stationary water sites and the associated traffic for accessing and maintaining the sites would require some use of Refuge resources, including personnel and funding. Humanitarian organizations would be responsible for the planning, installation and maintenance of all water stations but the Refuge would assume costs associated with the long term coordination and monitoring of permits issued for this proposed use. Refuge resources are limited and time expended to coordinate with humanitarian organizations regarding water sites would divert efforts from accomplishing Refuge purposes. However, administration and management of a potential permit for drinking water sites could be accomplished within the existing financial and personnel resources available to the Refuge.

Anticipated Impacts of the Drinking Water Sites

The installation of infrastructure of any type in natural areas is generally not considered to be beneficial for wildlife or their habitats. The lack of a fully effective strategy to reduce illegal border activity has resulted in a significant amount of environmental damage on the Refuge. Illegal immigration and smuggling along the border compromises the aesthetic value of the Refuge and the safety of staff, volunteers, and visitors. The trash resulting from illegal immigrants and humanitarian organizations, illegal trails and roads, fence cutting, abandoned vehicles, arson, livestock trespass, and human waste and disturbance continue to have major impacts on effective wildlife conservation on the Refuge. The recent construction of the seven mile pedestrian barrier at the southern boundary of the Refuge (international border) has helped reduce some impacts but illegal border activities continue to cause damage to Refuge natural resources. Impacts currently occurring on the Refuge due to illegal activities and border enforcement include:

Trash – During 2009, up to 51 tons of litter were left on the Refuge by an estimated 20,700 illegal immigrants. Each immigrant leaves and estimated 3 to 5 pounds of trash on the Refuge. Furthermore, humanitarian organizations have placed thousands of one-gallon water containers and cans of food in and adjacent to the Refuge, exacerbating the larger problem of litter and environmental pollution.

Trails - More than 1,300 miles of illegal trails have been created on the Refuge by illegal activities and border enforcement. The direct damage is more than 300 acres of denuded vegetation, erosion, and wildlife disturbance throughout the Refuge as a result of increased human presence.

Illegal Roads – In the course of attempting to evade law enforcement officers, immigrants and smugglers have created several miles of unauthorized roads on the Refuge which are now also utilized by CBP agents. Due to the delicate nature of the soils on this Refuge, driving on an area just a couple times can create a permanent road.

Wildfire - Several fires are started each year by illegal immigrants resulting in significant environmental damage and substantial cost to the government. A single fire started in the vicinity of the Refuge in 2009 by an immigrant burned over 23,000 acres and cost federal and state government \$1.2 million to suppress.

Livestock Trespass – Illegal immigrants and smugglers often damage or cut fences or leave gates open, which allows cattle to enter the Refuge. This directly impacts the Refuge's wildlife habitat management program and subjects neighboring ranches to disease transmission from untreated Mexican livestock.

Increased Crime and Compromised Security – Illegal immigrants and smugglers have stolen Refuge vehicles, burglarized government quarters and offices, and committed vandalism. This has forced the Refuge into a defensive position that has required installation of expensive security infrastructure and the hiring of additional law enforcement officers.

Indirect Impacts – Diversion from wildlife management as staff coordinate with CBP and humanitarian organizations and address the various security risks to staff, volunteers, and the public.

Due to the impacts listed above, any additional drinking water stations must be located using the best available information to reduce or eliminate as many adverse impacts as possible while still providing safe drinking water to help prevent deaths.

Permitted stations would be established to help save the lives of individuals traveling across Refuge land. Although illegal border traffic across Refuge lands is significantly impacting the natural environment and the presence of additional water stations may attract additional illegal use; the increase would probably be on already established trails and should have minimal additional adverse impact on Refuge resources.

Direct Impacts

Direct negative impacts to Refuge natural resources from placement of water stations is likely to occur. These may include direct habitat loss at drinking water station sites and wildlife and habitat disturbance during their installation, maintenance, and use. Some examples of disturbance include the noise produced from vehicles and personnel and the physical disturbance to wildlife from illegal migrants using sites. In addition, humanitarian organizations would visit the sites on a weekly maintenance schedule. Vehicles used to perform site maintenance would include 2- or 4-wheel drive trucks.

Indirect Impacts

The drinking water stations may indirectly increase adverse impacts to Refuge wildlife and habitats by altering movement patterns of illegal immigrants traveling through the Refuge. Some of the proposed sites would be situated on high points to provide the best possible 360-degree view to migrants. However, sites are more likely to be situated in low-lying areas such as drainages with dense vegetation where migrants are less visible. Low-lying habitats have higher concentrations of wildlife because they are shaded, cooler, and more diverse. Therefore, it is possible drinking water sites could divert people into the most highly sensitive areas of the Refuge. However, whether or not additional drinking water sites are provided, illegal immigrants naturally travel more through low lying areas where they are less detectable.

With regard to potential effects on endangered species, the Refuge believes that by strategically locating drinking water sites using the Drinking Water Placement Assessment map to avoid sensitive habitats or other areas that could impact endangered species, no adverse impacts to masked bobwhite quail, Chiricahua leopard frogs, Pima pineapple cacti, jaguar or the lesser longnosed bat would occur as a result of permitting this use.

<u>Visitor Use</u> - Most visitors come to the Refuge to birdwatch, hunt or camp. Requiring a minimum of one-quarter mile buffer from all designated camp sites should minimize impacts to campers. However, the proposed drinking water sites could be within Refuge hunt zones.

Visitors come to enjoy the Refuge's "undeveloped" outdoors and the beauty of the landscape and its wildlife. The presence of drinking water sites and associated activities over a larger portion of the Refuge may decrease the overall quality of recreational opportunities by negatively affecting views, increasing noise pollution, and increasing wildlife disturbance. Conversely, permitting additional sites could reduce illegal immigrant traffic in some areas by diverting use to the permitted sites, thus enhancing public safety and reducing other negative impacts of illegal border traffic on visitors and recreational opportunities. There should also be a cessation of unauthorized placement of food and water by humanitarian organizations.

<u>Refuge Roads</u> - The Refuge has nearly 300 miles of existing roads which are currently used extensively by visiting public. In addition, CBP agents often patrol Refuge roads in order to detect and apprehend illegal immigrants. This use has contributed both to the deterioration of the roads and to destruction of some Refuge native vegetation. Some roads are no longer passable. There would be no additional effort to maintain roads in order to facilitate water site use or maintenance.

Cumulative Impacts

Permitting new drinking water station may conflict with several Refuge wildlife and habitat goals and objectives. While some impacts would be short-term, use and maintenance of sites would occur over the long-term and may affect a much larger portion of the Refuge. The cumulative impacts of permitting drinking water sites, SBInet project activities, and other ongoing border security projects and operations are of primary concern. In addition to humanitarian organizations legally or illegally placing water, food and other supplies on the Refuge, other ongoing activities which impact Refuge wildlife, habitats, and infrastructure, include: patrolling by CBP agents (24 hours a day; 7 days a week) on and off-Refuge roads; construction of seven miles of pedestrian barrier along the Refuge's southern boundary; and operation by CBP of several rescue beacons and SBInet towers, a heliport with fueling station, and an equestrian facility.

Potential permitting of additional drinking water stations in and of itself may have very little direct impact to natural resources on the Refuge but the cumulative effect of U.S. Department of Homeland Security and unauthorized humanitarian activities and illegal border traffic have contributed to deterioration of the Refuge landscape.

Conclusion

Because Buenos Aires NWR is situated on the U.S./Mexico border and as a consequence has experienced extreme environmental degradation, the Refuge must consider both the long and short term effects of this proposal. The placement of stationary drinking water stations has potentially both adverse and beneficial effects on Refuge resources. The stated goal of humanitarian organizations is to reduce or eliminate illegal immigrant deaths on Refuge lands. At this time, there are no formal studies or published analyses illustrating the effectiveness of providing water as a method to reduce deaths. If the numbers of deaths are not reduced by this

activity, the need for permitting water stations on the Refuge would be re-evaluated and could be reduced or eliminated. With reduction or redirection of overall border related activity, there could be a net beneficial effect on natural resources on the Refuge. However, even if the water stations function as planned, direct, indirect, and cumulative effects may have an overall long-term negative impact to wildlife and their habitats. Adequate Refuge oversight of station placement and maintenance should minimize impacts to the land and biological resources. Clearly, the efficacy of drinking water stations and potential impacts to natural resources is not fully understood and deserving of further study.

The purpose of this document is to evaluate requests of humanitarian organizations to place drinking water stations on the Refuge in support of their goal to reduce and eliminate migrant deaths. Specifically, the Refuge Manager must consider whether placement of water stations would materially interfere with or detract from fulfillment of the National Wildlife Refuge System mission or the purposes of Buenos Aires NWR. A Compatibility Determination must be based on sound professional judgment and be consistent with the principles of sound fish and wildlife management and administration, available science and resources, and adhere to applicable federal laws and Service policies. A central part of this determination is a Refuge Manager's field experience and knowledge of the particular Refuge's resources.

The placement of the drinking water stations as proposed may have some immediate direct adverse impacts to the environment of the Refuge. However, since potential permitting of this activity would be contingent on close coordination between the Refuge and a permittee, the proposed use should not interfere with or detract from Refuge purposes nor significantly impact fulfillment of the National Wildlife Refuge System mission. This is because placement of additional water stations on the Refuge should result in: (1) decreased numbers of individuals dying due to dehydration on Refuge lands, (2) decreased traffic by illegal immigrants in sensitive areas away from water stations, (3) reduced placement of litter by humanitarian organizations, and (4) a greater likelihood of habitat protection, recovery and restoration.

Public Review and Comment

The National Wildlife Refuge System Improvement Act of 1997 requires the Refuge Manager to provide an opportunity for public review and comment when drafting Compatibility Determinations. The purpose is to offer the public an opportunity to provide the Service any relevant information to help evaluate the compatibility of the proposed use. The Refuge Manager must consider all information provided during the public review and comment period. The Refuge Manager is not required to respond but will use all information available to make the most informed decision possible.

Public review and comment was initially solicited for this Draft Compatibility Determination for a 30 day period beginning April 2, 2010. The availability of the draft Compatibility Determination was announced through a press release distributed to all media outlets in southern Arizona. There were also public notices posted in the Sasabe and Arivaca Post Offices; Arivaca Mercantile bulletin board; and the Arivaca and Green Valley Public Libraries. Copies of the draft Compatibility Determination were also available at the two libraries mentioned above and online at: www.fws.gov/southwest/ and on the Buenos Aires NWR website.

The following summarizes the comments received:

Determination

	Use is Not Compatible
X	Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility

For successful permitting of additional drinking water stations on the Refuge, humanitarian organizations would be required to cooperate closely with the Service to develop measures to minimize and/or eliminate the environmental impacts their activities would have on the Refuge. Humanitarian organizations and their volunteers would be held accountable for their activities on the Refuge and for adhering to any Refuge permit terms and conditions, relevant federal regulations, and Service policies to ensure their activities avoid or minimize any future adverse environmental effects. Installation, operation, and associated maintenance of additional drinking water stations on the Refuge would be permitted assuming humanitarian organizations agree to abide by the following stipulations:

Stipulation 1:

Locations of all additional drinking water station sites would be contingent upon approval by the Refuge Manager and be identified using the attached Drinking Water Placement Assessment Map which is subject to future updating by the Refuge. All water stations must be accessible from established roads and placed no further than 100 meters from a road. No new roads of any length may be established to access any site and sites must be accessed by foot from the established road without the use of any mechanical or wheeled device.

Stipulation 2:

Water stations must not interfere with nor create a safety hazard to Refuge staff, volunteers, and visitors and Refuge neighbors. No station would be placed within one-quarter mile of a designated camp site during October 1 through April 30. At no time will a station be permitted within one mile of any Refuge or neighbors building or facility. If it is determined that any water station poses a safety hazard to Refuge staff, volunteers, or visitors, the permittee would be required to remove the station within three days of verbal or written notification by the Refuge Manager.

Stipulation 3:

The water stations would consist of a minimum of one a 1-gallon tethered container up to a maximum of two 55-gallon containers that are placed on a site in a manner that prevents their removal by a person or persons traveling on foot.

Stipulation 4:

Permittee must furnish the Refuge annually with official documentation that they are maintaining water stations in accordance with applicable federal, state and local water quality standards.

Stipulation 5:

Permittee would be required to obtain liability insurance in the amount of \$2,000,000.00 per occurrence that names the U.S. Fish and Wildlife Service and Buenos Aires NWR as additionally insured and holds the United States harmless from any and all liability to third parties as a result of water station activity.

Stipulation 6:

Permittee would monitor each site on a weekly basis and all trash and other associated debris would be removed from each site during weekly site visits by the permittee and their volunteers.

Stipulation 7:

Permittee would maintain a log of site visits to include the date of each visit, gallons of water disbursed at each site, amount of water remaining at each site, description and license plate numbers of all vehicles used and names of personnel responsible for the permit activities.

Stipulation 8:

Beginning one year from the date of issuance of their Special Use Permit and annually thereafter if the permit is issued for more than one year, the permittee would provide BANWR an annual report of their permitted activities to include gallons of water dispersed and a copy of the log of visits to each site during the previous calendar year.

Stipulation 9:

Permittee would conduct any and all activities on BANWR in a lawful manner and fully comply with the laws, regulations and rules applicable to BANWR. The permit issued would in no way waive compliance with any laws of the United States.

Stipulation 10:

Buenos Aires NWR would issue and the permittee would agree to and sign a Special Use Permit (SUP) addressing establishment, maintenance, and monitoring of water stations prior to placement of any water on the Refuge. The SUP would include the stipulations of this Compatibility Determination as terms and conditions and the SUP would be revoked should any stipulation not be met.

National Environmental Policy Act (NEPA) Compliance

The activities outlined in this Compatibility Determination fall within the Categorical Exclusion category under the National Environmental Policy Act.

(5) The issuance or reissuance of special use permits for the administration of specialized uses, including agricultural uses, or other economic uses for management purposes, when such uses are compatible, contribute to the purposes of the refuge system unit, and result in no or negligible environmental effects.

The NEPA Categorical Exclusion documentation will be accessible online at www.fws.gov/southwest/refuges/ when this Compatibility Determination is finalized.

Signature: Refuge Manager

Concurrence: Regional NWRS Chief

Mandatory 15-year Re-Evaluation Date: May 2025

Attachments:

• Refuge map - Drinking Water Placement Assessment